

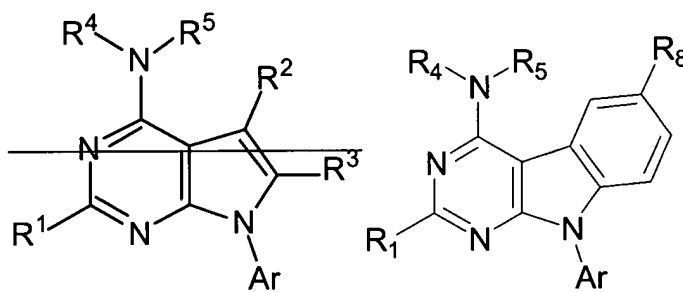
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Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

Claim 1. (Currently amended) A compound of the formula:



or a pharmaceutically acceptable ~~salts~~ salt thereof wherein

Ar is phenyl, 1- or 2-naphthyl, 2-, 3-, or 4-pyridyl, 2-, 4- or 5-pyrimidinyl, each of which is mono-, di-, or trisubstituted with halogen, trifluoromethyl, hydroxy, amino, cyano, carboxamide, C₁-C₆ alkyl, C₁-C₆ alkoxy, C₃-C₇ cycloalkyl, or amino(C₁-C₆)alkyl with the proviso that at least one of the ortho or para positions of Ar is substituted;

R¹ is hydrogen, halogen, trifluoromethyl, carboxamide, carboxylate, C₁-C₆ alkyl, C₃-C₇ cycloalkyl, or (C₁-C₆

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alkyl)-G¹-R⁶ wherein G¹ is nitrogen, oxygen or sulfur and R⁶ is hydrogen, C₃-C₇ cycloalkyl, or C₁-C₆ alkyl;

R⁸ is -(C₀-C₆ alkyl)-OR⁹ where R⁹ is hydrogen or (C₁-C₆)alkyl;

~~R² and R³ together represent (C₀-C₂)-G²-(C₂-C₄) wherein G² is methylene, oxygen, sulfur or NR⁷, wherein R⁷ is hydrogen, C₃-C₇ cycloalkyl, or C₁-C₆ alkyl; or~~

~~R² and R³ taken together represent CH-A-CH-CH wherein~~

~~A is N or CR⁸;~~

~~R⁸ is (C₀-C₆ alkyl)-Z;~~

~~Z is CR⁹R^{9'}, NR⁹R^{9'}, OR⁹ or SR⁹; and~~

~~R⁹ and R^{9'} independently represent hydrogen or (C₁-C₆)alkyl;~~

R⁴ and R⁵ are the same or different and represent hydrogen, hydroxy, C₁-C₆ alkoxy(C₁-C₆)alkyl, hydroxy(C₁-C₆)alkyl, C₃-C₇ cycloalkyl, or C₁-C₆ alkyl; or phenyl, 2-, 3-, or 4-pyridyl, 2- or 3-thienyl, or 2-, 4-, or 5-pyrimidinyl, each of which is optionally mono- or disubstituted with halogen, trifluoromethyl, hydroxy, C₁-C₆ alkyl, C₃-C₇ cycloalkyl, or C₁-C₆ alkoxy; or

R⁴ and R⁵ together represent -(C₂-C₃)-G³-(C₁-C₃)- where

G³ is methylene, 1,2 phenylene, oxygen, sulfur or NR¹⁰; and

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R^{10} is C_1-C_6 alkyl, C_3-C_7 cycloalkyl, phenyl, 2-, 3-, or 4-pyridyl, 2- or 3-thienyl, or 2-, 4- or 5-pyrimidyl.

Claim 2 (Cancelled)

Claim 3. (Currently amended) A compound according to claim 1, wherein R^8 is hydroxy or C_1-C_6 alkoxy ~~hydrogen or C_1-C_6 alkyl~~.

Claim 4. (Original) A compound according to claim 1, wherein Ar is phenyl mono-, di-, or trisubstituted with halogen, trifluoromethyl, hydroxy, amino, cyano, carboxamide, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_3-C_7 cycloalkyl, or amino(C_1-C_6)alkyl with the proviso that at least one of the ortho positions of Ar is substituted.

Claim 5. (Original) A compound according to claim 4, wherein Ar is phenyl substituted in the 2 and 4 positions with methyl, fluoro or chloro.

Claim 6. (Original) A compound according to claim 3, wherein Ar is 2,4,6-trimethylphenyl.

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Claim 7. (Original) A compound according to claim 6, wherein R^4 and R^5 independently represent hydrogen, C_1-C_6 alkoxy(C_1-C_6) alkyl, C_3-C_7 cycloalkyl, or C_1-C_6 alkyl.

Claim 8. (Currently amended) A compound according to claim 1 2, wherein R^8 is hydroxy ~~NR^9R^{9a}~~ .

Claim 9. (Currently amended) A compound according to claim 1 2, wherein R^8 is C_1-C_6 alkoxy ~~$(C_1-C_6$ alkyl) NR^9R^{9a}~~ .

Claims 10-12 (Cancelled)

Claim 13. (Currently amended) A compound according to claim 9 12, wherein Ar is 2,4,6-trimethylphenyl.

Claim 14. (Original) A compound according to claim 13, wherein R^4 and R^5 independently represent hydrogen, C_1-C_6 alkoxy(C_1-C_6) alkyl, C_3-C_7 cycloalkyl, or C_1-C_6 alkyl.

Claims 15-52 (Cancelled)

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Claim 53. (Original) A pharmaceutical composition comprising a compound according to claim 1 and at least one pharmaceutically acceptable carrier or excipient.

Claim 54. (Cancelled)

Claim 55. (Original) A packaged pharmaceutical composition comprising the pharmaceutical composition of Claim 53 in a container and instructions for using the composition to treat a patient in need thereof.

Claim 56. (Original) The packaged pharmaceutical composition of claim 55, wherein said patient is suffering from stress, posttraumatic stress disorder, anxiety, depression, cardiovascular disease, headache, obesity or an eating disorder.

Claim 57. (Original) A method for localizing CRF receptors in tissue section samples comprising:

contacting with a sample of tissue a detectably-labelled compound of Claim 1 under conditions that permit binding of the compound to the sample of tissue;

washing the tissue sample to remove unbound compound; and

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detecting the bound compound.

Claim 58. (Original) A method for the treatment or prevention of physiological disorders associated with excess of or insufficient amount of CRF, which method comprises administration to a patient in need thereof an effect amount of a compound according to Claim 1.

Claim 59. (Original) A method of inhibiting the binding of CRF to the CRF1 receptor, which method comprises contacting, in the presence of CRF, a solution comprising a compound of Claim 1, with cells expressing the CRF1 receptor, wherein the compound is present in the solution at a concentration sufficient to reduce levels of CRF binding to IMR32 cells in vitro.

Claim 60. (Original) A method for altering the signal-transducing activity of a cell surface CRF1 receptor, said method comprising contacting cells expressing such a receptor with a solution comprising a compound according to Claim 1, wherein the compound is present in the solution at a concentration sufficient to reduce levels of CRF binding to IMR32 cells in vitro.

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Claim 61. (Original) A compound according to Claim 1 wherein in a standard assay of CRF binding the compound exhibits an IC_{50} of 1 micromolar or less.

Claim 62. (Original) A compound according to Claim 1 wherein in a standard assay of CRF binding the compound exhibits an IC_{50} of 100 nanomolar or less.

Claim 63. (Original) A compound according to Claim 1 wherein in a standard assay of CRF binding the compound exhibits an IC_{50} of 10 nanomolar or less.

Claim 64. (Original) A method for treating stress, posttraumatic stress disorder, anxiety or depression which comprises administering an effective amount of a compound according to Claim 1 to a patient in need thereof.

Claim 65. (Original) A method for treating obesity or eating disorders which comprises administering an effective amount of a compound according to Claim 1 to a patient in need thereof.

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Claim 66. (Original) A method for treating cardiovascular disorders which comprises administering an effective amount of a compound according to Claim 1 to a patient in need thereof.

Claim 67. (Original) A method for treating headache which comprises administering an effective amount of a compound according to Claim 1 to a patient in need thereof.

Claim 68. (New) A compound according to claim 8, wherein Ar is 2,4,6-trimethylphenyl.

Claim 69. (New) A compound according to claim 8, wherein R^4 and R^5 independently represent hydrogen, C_1-C_6 alkoxy(C_1-C_6) alkyl, C_3-C_7 cycloalkyl, or C_1-C_6 alkyl.